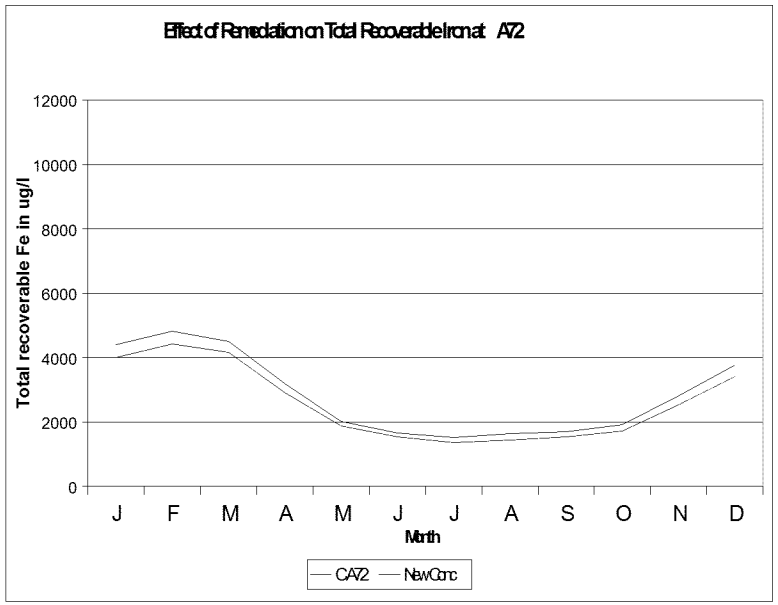
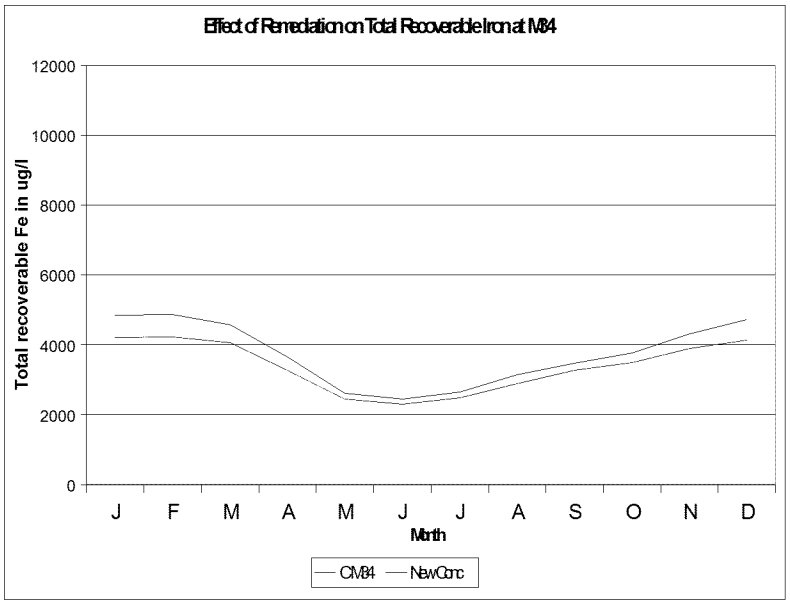
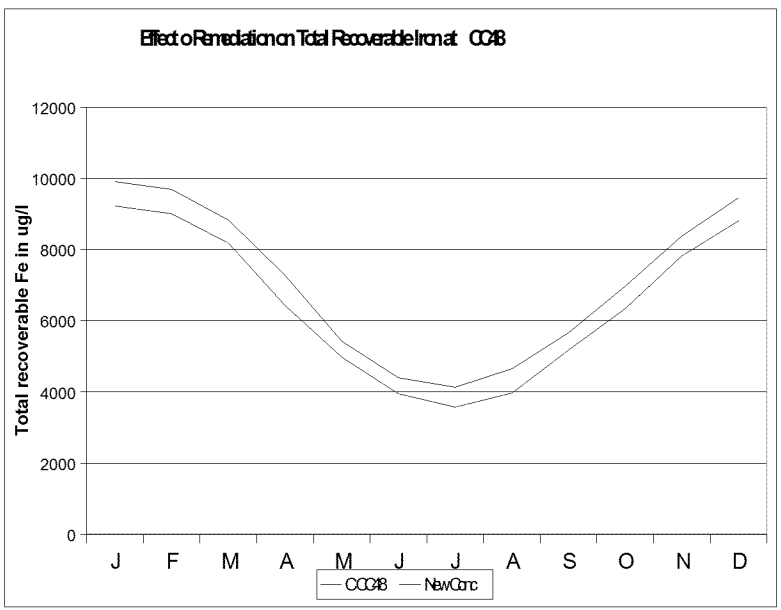
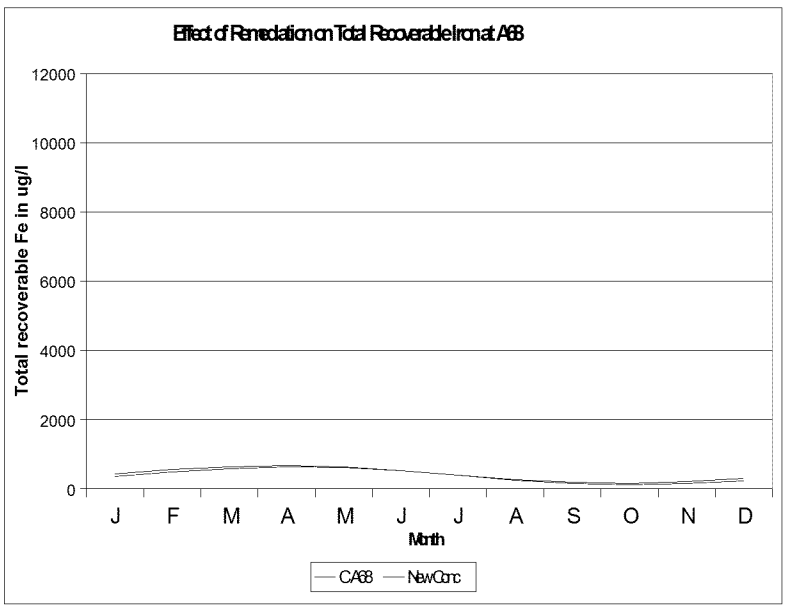

Effect of Remediation on Total Recoverable Iron at A72
Total recoverable Fe in ug/l
12000
10000
8000
6000
4000
2000
0
J F M A M J J A S O N D
Month
CA72
NewConc


Effect of Remediation on Total Recoverable Iron at M84
Total recoverable Fe in ug/l
12000
10000
8000
6000
4000
2000
0
J F M A M J J A S O N D
Month
CM84
NewConc


Effect o Remediation on Total Recoverable Iron at CC48
Total recoverable Fe in ug/l
12000
10000
8000
6000
4000
2000
0
J F M A M J J A S O N D
CCC48
NewConc


Effect of Remediation on Total Recoverable Iron at A68
Total recoverable Fe in ug/l
12000
10000
8000
6000
4000
2000
0
J F M A M J J A S O N D
Month
CA68
NewConc

charge in cfs				
	Intercept	coefficient		
			Low Flow November-March	
M34	-2.771	0.394	-2.28954	0.38718
CC48	1.752	0.130	6.77165	0.10539
A68	-11.131	0.498	-3.62869	0.45153

Total Recoverable Iron Coefficients		
	B	Intercept
A72	0.290	967.14829
M34	0.046	2213.03711
CC48	1.000	6149.71503
A68	0.000	417.72851

Discharge Relationships among the three gages

	MONTH	J	F	M	A	M	J	J
	Intercept	1	1	1	1	1	1	1
	A 72	64	63	77	155	682	1196	624
	M34	22	22	28	58	266	468	243
	CC48	14	13	15	22	91	158	83
	A68	25	25	31	66	329	585	300
	Ground wate	3	3	3	9	-3	-14	-2
1/(1+BQ) Discharge Representation								
	A 72	0.0511	0.0519	0.0429	0.0218	0.0050	0.0029	0.0055
	M34	0.4915	0.4959	0.4413	0.2718	0.0756	0.0444	0.0821
	CC48	0.0689	0.0694	0.0629	0.0435	0.0109	0.0063	0.0119
	A68	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Date variables								
	sin	0.1552	0.6358	0.9276	0.9887	0.7862	0.3629	-0.1441
	cos	0.9879	0.7719	0.3737	-0.1496	-0.6180	-0.9318	-0.9896
	sin1	0.3066	0.9815	0.6932	-0.2959	-0.9717	-0.6763	0.2852
	cos1	0.9518	0.1916	-0.7207	-0.9552	-0.2361	0.7366	0.9585
	Consent	1	1	1	1	1	1	1
A72	Intercept	1	1	1	1	1	1	1
	BQ	0.0511	0.0519	0.0429	0.0218	0.0050	0.0029	0.0055
	sin	0.1552	0.6358	0.9276	0.9887	0.7862	0.3629	-0.1441
	cos	0.9879	0.7719	0.3737	-0.1496	-0.6180	-0.9318	-0.9896
	sin1	0.3066	0.9815	0.6932	-0.2959	-0.9717	-0.6763	0.2852
	cos1	0.9518	0.1916	-0.7207	-0.9552	-0.2361	0.7366	0.9585
	Consent							
A72 Concentration		**4400**	**4835**	**4503**	**3201**	**2015**	**1663**	**1522**
M34	Intercept	1	1	1	1	1	1	1
	BQ	0.4915	0.4959	0.4413	0.2718	0.0756	0.0444	0.0821
	sin	0.1552	0.6358	0.9276	0.9887	0.7862	0.3629	-0.1441
	cos	0.9879	0.7719	0.3737	-0.1496	-0.6180	-0.9318	-0.9896
	sin1	0.3066	0.9815	0.6932	-0.2959	-0.9717	-0.6763	0.2852
	cos1	0.9518	0.1916	-0.7207	-0.9552	-0.2361	0.7366	0.9585
	Consent	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
M34 Concentration		**4848**	**4871**	**4578**	**3670**	**2618**	**2451**	**2653**

CC 48	Intercept	1	1	1	1	1	1	1
	BQ	0.0689	0.0694	0.0629	0.0435	0.0109	0.0063	0.0119
	sin	0.1552	0.6358	0.9276	0.9887	0.7862	0.3629	-0.1441
	cos	0.9879	0.7719	0.3737	-0.1496	-0.6180	-0.9318	-0.9896
	sin1	0.3066	0.9815	0.6932	-0.2959	-0.9717	-0.6763	0.2852
	cos1	0.9518	0.1916	-0.7207	-0.9552	-0.2361	0.7366	0.9585
	Consent	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
CC 48 Concentratrion		**9912**	**9699**	**8832**	**7285**	**5433**	**4412**	**4134**
A68	Intercept	1	1	1	1	1	1	1
	BQ	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	sin	0.1552	0.6358	0.9276	0.9887	0.7862	0.3629	-0.1441
	cos	0.9879	0.7719	0.3737	-0.1496	-0.6180	-0.9318	-0.9896
	sin1	0.3066	0.9815	0.6932	-0.2959	-0.9717	-0.6763	0.2852
	cos1	0.9518	0.1916	-0.7207	-0.9552	-0.2361	0.7366	0.9585
	Consent							
A68 Concentration		**432**	**560**	**644**	**673**	**633**	**534**	**406**
Concentratio		2640	2715	2611	2171	1626	1492	1530
Load in pounds per day								
	Sum	1410	1398	1547	2361	7515	11521	5979
	A72	1521	1645	1872	2680	7420	10739	5127
	% Difference	-0.07	-0.15	-0.17	-0.12	0.01	0.07	0.17
	RPD	-0.08	-0.16	-0.19	-0.13	0.01	0.07	0.15

tal Recoverable Iron Coefficients

BQ	sin	cos
70284.48741	672.13924	-267.91244
5360.03508	515.84443	1296.14462
21591.29071	532.89897	2218.80854
0	254.47374	-25.25660

A	S	O	N	D
1	1	1	1	1
268	187	142	92	70
103	71	53	33	25
37	26	20	16	14
122	82	60	38	28
6	8	9	4	3
0.0127	0.0181	0.0237	0.0361	0.0469
0.1746	0.2348	0.2903	0.3948	0.4670
0.0265	0.0368	0.0470	0.0572	0.0660
1.0000	1.0000	1.0000	1.0000	1.0000
-0.6271	-0.9360	-0.9878	-0.7716	-0.3573
-0.7789	-0.3521	0.1556	0.6361	0.9340
0.9769	0.6591	-0.3074	-0.9816	-0.6674
0.2135	-0.7521	-0.9516	-0.1908	0.7447
1	1	1	1	1
1	1	1	1	1
0.0127	0.0181	0.0237	0.0361	0.0469
-0.6271	-0.9360	-0.9878	-0.7716	-0.3573
-0.7789	-0.3521	0.1556	0.6361	0.9340
0.9769	0.6591	-0.3074	-0.9816	-0.6674
0.2135	-0.7521	-0.9516	-0.1908	0.7447
1647	**1705**	**1928**	**2817**	**3777**
1	1	1	1	1
0.1746	0.2348	0.2903	0.3948	0.4670
-0.6271	-0.9360	-0.9878	-0.7716	-0.3573
-0.7789	-0.3521	0.1556	0.6361	0.9340
0.9769	0.6591	-0.3074	-0.9816	-0.6674
0.2135	-0.7521	-0.9516	-0.1908	0.7447
1.0000	1.0000	1.0000	1.0000	1.0000
3149	**3471**	**3769**	**4329**	**4716**

1	1	1	1	1
0.0265	0.0368	0.0470	0.0572	0.0660
-0.6271	-0.9360	-0.9878	-0.7716	-0.3573
-0.7789	-0.3521	0.1556	0.6361	0.9340
0.9769	0.6591	-0.3074	-0.9816	-0.6674
0.2135	-0.7521	-0.9516	-0.1908	0.7447
1.0000	1.0000	1.0000	1.0000	1.0000
4660	**5665**	**6984**	**8386**	**9457**

1	1	1	1	1
1.0000	1.0000	1.0000	1.0000	1.0000
-0.6271	-0.9360	-0.9878	-0.7716	-0.3573
-0.7789	-0.3521	0.1556	0.6361	0.9340
0.9769	0.6591	-0.3074	-0.9816	-0.6674
0.2135	-0.7521	-0.9516	-0.1908	0.7447
278	**188**	**162**	**205**	**303**
1713	1830	1966	2267	2510
2912	2290	1994	1619	1442
2384	1722	1478	1400	1428
0.22	0.33	0.35	0.16	0.01
0.20	0.28	0.30	0.15	0.01

A72

Chronic TVS at A72

	a2	b2
Cd	-3.49	0.7852
Cu	-1.485	0.8545
Mn	4.785	0.5434
Zn	0.7614	0.8473

Predicction Equation Coefficients

	Hardness
B	0.006
Intercept	82.304
BQ	200.676
sin	16.936
cos	48.860
sin1	15.385
cos1	-5.633

Month	J	F	M	A	M	J	J
Q	64	63	77	155	682	1196	624
Hardness	277	290	268	196	91	53	72
Fe	1000	1000	1000	1000	1000	1000	1000

M 34

Prediction equation coefficients

	Hardness	Aluminum	Cadmium	Copper	Iron	Zinc
B	0.013	1.00	0.021	0.123	0.06521	0.021
Intercept	60.05228	15.10361	0.91724	14.65129	77.70523	05.25873
BQ	05.02801	38.29032	0.60966	00.98354	70.29706	78.11589
sin	9.24827	69.03843	0.26911	14.16661	-89.38888	88.77920
cos	32.30173	79.08681	0.20991	10.17487	38.04002	85.94018
sin1	435.43127	-0.12214	1.04278	86.24646	-17.99615	
cos1	123.10453	-0.14689	-3.82920	-12.30367	-45.60154	
consent	-265.10754		-10.75402	35.80515	-98.00378	

	MONTH	J	F	M	A	M	J	J
Avg monthly	Q	22	22	28	58	266	468	243
	Hardness	255	241	226	170	86	60	76
Chronic Stan	Fe	1000	1000	1000	1000	1000	1000	1000

A68 Animas at Silverton

Prediction equation coefficients

		Hardness	Cadmium	Copper	Manganes	Zinc
	B	0.011	na	na	0.010	0.016
	Intercept	37.945	2.395	5.783	258.473	304.617
	BQ	165.600			1371.923	644.136
	sin		1.712	2.049	611.024	315.451
	cos		0.140	0.729	81.662	-18.603
	sin1		-0.250	-1.520	16.031	-33.783
	cos1		-1.185	-0.472	-263.628	-140.108
	May		-1.936	2.261	-258.699	
	consent		-0.714	-1.828	411.428	-67.174

Animas R	Month	J	F	M	A	M	J	J
	Q	25	25	31	66	329	585	300
	Hardness	168	168	161	134	74	60	76
	Cd,tvs	1.7	1.7	1.7	1.4	0.9	0.8	0.9
	Cu tvs	18	18	17	15	9	8	9
	Mn tvs	1935	1938	1895	1713	1240	1110	1264
onic stand	Fe	1000	1000	1000	1000	1000	1000	1000

ction Equation Coefficients

A	S	O	N	D
268	187	142	92	70
124	158	182	215	248
1000	1000	1000	1000	1000

	Acute TVS at M34		Chronic TVS at M34	
	a2	b2	a3	b3
Cd	-3.828	1.128	-3.49	0.7852
Cu	-0.7703	0.9422	-1.485	0.8545
Mn	4.4995	0.7893	4.785	0.5434
Zn	0.8904	0.8473	0.7614	0.8473

A	S	O	N	D
103	71	53	33	25
126	151	192	217	253
1000	1000	1000	1000	1000

	Chronic TVS at A68	
	a2	b2
Cd	-3.49	0.7852
Cu	-1.485	0.8545
Mn	4.785	0.5434
Zn	0.7614	0.8473

A	S	O	N	D
122	82	60	38	28
109	125	138	155	165
1.2	1.4	1.5	1.6	1.7
12	14	15	17	18
1528	1650	1741	1854	1916
1000	1000	1000	1000	1000